



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/655,717      | 09/05/2003  | Peiguang Zhou        | KCC-19188           | 8792             |

7590

06/13/2006

Melanie I. Rauch  
Pauley Petersen & Erickson  
Suite 365  
2800 West Higgins Road  
Hoffman Estates, IL 60195

|          |
|----------|
| EXAMINER |
|----------|

KRUE, KEVIN R

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

1773

DATE MAILED: 06/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/655,717

**Applicant(s)**

ZHOU, PEIGUANG

**Examiner**

Kevin R. Kruer

**Art Unit**

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 03 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 18-22, 24-35, 44-48 and 52-65 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-22, 24-35, 44-48 and 52-65 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

*The examiner notes claims 33-35 have incorrect status identifiers. Each claim should be labeled "original."*

#### ***Double Patenting***

1. The rejection of claims 18-35 and 44-65 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12 of U.S. Patent No. 6,872,784 in view of WO 02/053688 (herein referred to as Kimberly Clark) has been overcome by amendment and/or argument.

#### ***Claim Rejections - 35 USC § 103***

2. Claims 18-22, 24-35, 44-48, and 52-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/053668 (herein referred to as Zhou) in view of Lakshmann et al (US 4,857,594).

Zhou teaches a laminate structure comprising a first and second facing layers and an adhesive comprising selected ratios of crystalline and atactic polyolefin (abstract). The atactic polymer has a degree of crystallinity of below 20% (page 4, lines 24+), a molecular weight to 1,000-3,0000 (page 4, lines 25+), and comprises 50-90wt% of the composition. The crystalline polymer has a crystallinity of 40% or greater (page 6, lines 1+), a molecular weight of 3,000-200,000, and comprises 5-50wt% of the composition (page 6, lines 9+). The composition may further comprise up to 50% tackifier, anti-oxidizing agent, pigment, fillers, compatibilizer, and the like (page 23, lines 8+). The first and second layers may comprise non-woven materials. Alternatively, the two substrates may comprise a single sheet (page 7) or elastomeric (periodic or non-periodic) polymer strands (example 6). Said laminate may comprise a personal care

Art Unit: 1773

garment such as a diaper or other absorbent structure taught in the prior art (page 23, lines 28+ and top of page 21). The laminate preferably has a static peel failure time of at least 8 hours (claim 26), an open time up to 1 second (claim 38), and a relative accretion value of less than 0.2 (claim 30).

Zhou teaches all the claim limitations with the exception of the addition of an elastomeric base polymer to the adhesive. However, Lakshmanan teaches the addition of a selectively hydrogenated block copolymer to an amorphous polyolefin adhesive (abstract) in order to improve its adhesion to polyolefin substrates (col 1, lines 48+). The block copolymer may comprise SEBS or SIS (col 3, lines 59+). The styrene content is 5-50wt% (col 4, lines 13+). Said elastomer is added in amounts of 5-20wt% based upon 100wt% of an amorphous polypropylene/elastomer/tackifier mixture (see Table 1). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a polyolefin/elastomer/tackifier blend comprising 30-90wt% amorphous polyolefin and 5-20wt% elastomer in place of the amorphous component taught in Zhou. The motivation for doing so would have been to improve the composition's adhesion to polyolefin substrates.

The examiner notes the claimed 180°C static peel strength and dynamic peel strength are understood to be latent properties of the laminate structure rendered obvious by the prior art. Furthermore, the examiner notes the adhesive of Zhou meets said limitations (see examples).

***Response to Arguments***

Applicant's arguments filed April 3, 2006 have been fully considered but they are not persuasive.

Applicant argues Zhou teaches away from adding an elastomer or other conventional components to the adhesive taught therein because the reference teaches the adhesive "generally performs better and costs less than conventional hot melts (page 3 lines 4-5)." Applicant further argues Zhou teaches no advantage is seen when other additives are included in the blend. Said argument is noted but is not persuasive. Zhou does not have to teach an advantage is expected when block copolymers are added to the composition. Rather, the prior art as a whole must demonstrate that one of ordinary skill in the art at the time the invention was made would have reasonably expected benefits from adding the block copolymers to the adhesive taught in Zhou. The examiner maintains the position that the skilled artisan, given the teachings of Zhou and Lakshmanan, would have expected a synergistic effect when adding the hydrogenated SEBS or SIS block copolymers to the composition of Zhou. Specifically, Lakshmanan teaches adding such block copolymers to polyolefin adhesives improves adhesion to polyolefin substrates (col 1, lines 48+). Thus, the examiner maintains the position that the prior art as a whole would have motivated one of ordinary skill in the art to combine the block copolymer taught in Lakshmanan to the polyolefin adhesive of Zhou.

Applicant further argues Zhou does not disclose an adhesive composition exhibiting both a 180° static peel strength of at least 6 hours and a dynamic peel

Art Unit: 1773

strength after 85% stretch of at least about 2000grams per 2-inch width. Specifically, applicant argues that while the dynamic peel strengths disclosed in Zhou read on the claimed dynamic peel strength values, the values disclosed in Zhou were measured without first stretching the laminate. The examiner concedes Zhou does not stretch the laminate before measuring its dynamic peel strength. But the skilled artisan would have expected the adhesive to become elastic after the addition of an elastomeric component. Furthermore, Lakshmanan teaches the skilled artisan also would have expected an increase in peel strength as a result of the addition of the elastomer taught therein. Thus, the examiner maintains the position that said property is a latent property of the laminate structure rendered obvious by the prior art and that one of ordinary skill in the art would have expected the claimed adhesive to exhibit said properties based upon the teachings of the prior art.

Applicant further argues a tackifier is an essential ingredient of the composition taught in Lakshmanan. Said argument is noted, but tackifiers are not excluded from the presently claimed composition. Thus, said argument fails to render the claims non-obvious. Applicant argues the skilled artisan would have been dissuaded from adding the tackifier to the composition taught in Zhou because Zhou discourages the use of ingredients other than atactic and isotactic polymer. The examiner respectfully disagrees with applicant's reading of the reference. Zhou teaches tackifier may be added to the composition (page 23, lines 8+).

For the reasons noted above, the rejections are maintained.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R. Kruer whose telephone number is 571-272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1773

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'K- R K'.

Kevin R. Kruer  
Patent Examiner-Art Unit 1773